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ABSTRACT

Experiments at three community colleges were conducted to examine the relationships among anxiety, performance, and two different methods of informing students of their instructor's evaluation of in-class speeches. Subjects were 77 students in six speech classes. The three teachers of the classes gave traditional letter grades and comments on the speeches in one of their classes, but only evaluative comments in the second of their classes. Student communication apprehension was measured before and after they had given their four required speeches, and independent raters evaluated students' speeches. The results of multiple regression analysis indicated some support for the hypothesis predicting a relationship between grading condition and final anxiety. Confident students scored significantly higher than their anxious classmates in final performance regardless of grading condition. When students' initial performance scores were entered in the analyses as a covariate, it became apparent that the covariate was the stronger predictor of final performance. The combined post hoc findings did not support the prediction that grades and initial anxiety interacted with final performance. (RL)

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AN EXAMINATION OF THE RELATIONSHIP AMONG PERFORMANCE, SPEECH ANXIETY, AND GRADES: THREE FIELD EXPERIMENTS

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AN EXAMINATION OF THE RELATIONSHIP AMONG PERFORMANCE, SPEECH ANXIETY, AND GRADES: THREE FIELD EXPERIMENTS

Speech teachers have long been concerned about the methods and effects of their evaluations (Bos, 1966; Judd & Smith, 1977; White, 1967). An intent of this study was to examine the relationship among performance, anxiety, and grading. Grading was operationalized as two different methods of informing students of their instructors' evaluations of their in-class speeches.

The major claims made by proponents of traditional grades are that they provide incentives that motivate achievement (Hales, Bain & Rand, 1973; Karlins, Kaplin & Stuart, 1969; Johnson & O'Niell, 1973; Powell, 1977), act as rewards and punishments (Beaman, 1977; Hinton, 1978), and predict future academic success (Hills, Klock & Bush, 1965; Lewis, 1966; Scerba, 1979).

The critics of grades argue they are unreliable measures of achievement (Kelley, 1958; Kirby, 1962; Thompson, 1955) cause harmful anxiety (Jenness, 1962; Paul & Erickson, 1964; Spielberger, 1962) have negative effects on student's self-concepts (Book, Von Hoeven, Kreger & Sprague, 1978; Doerann-George, 1974; Ramayya, 1972) inhibit student's choice of classes (Milton & Edgerly, 1976; Stailings & Leslie, 1976) are influenced by instructor fear of low student evaluations (Powell, 1977) are sources of conflict

in the classroom (Frank, 1973) encourage cheating (Becker, Greer, & Hughes, 1968; Knowlton & Hamerlynck, 1967; Stailings & Leslie, 1976) may be influenced by sex biases (Caldwell & Harnett, 1967; Phillips, Durham, Brubaker, & Butt, 1970) and encourage conformity to the opinions of instructors (Stailings & Leslie, 1976).

A summary of the research focusing on linkages between oral communication apprehension, academic achievement, and learning can be found in McCroskey and Daly (1976) and McCroskey and Anderson (1976). While there are assertions that grades on speech performances cause anxiety (Herbold, 1971; Gruner, 1964), there is a lack of experimental data showing the relationships between anxiety, grades, and speech performance. Therefore, the present research returned to the basics of learning theory as explicated by communication educators to generate its hypotheses.

Learning Theory and Grading

Lashbrook (1976) described Skinner's (1957) operant conditioning approach as an elaboration of Thorndike's (1913) law of effect, which asserts individuals do what is pleasant and avoid situations which are unpleasant.

A constitutive definition of grades in Skinnerian terms as applied to public speaking classes necessitates examination of some findings in communication apprehension studies. McCroskey (1978) describes how verbal behaviors are learned with a conditioning-through-reinforcement theory:

> If a child is reinforced for being silent, and is not reinforced for communicating, the probable result is a quiet child. In addition, if the child not only is not reinforced for communicating, but often experiences some adverse experience (parent shouting, big brother hitting) when attempting to communicate, the quiet child result is even more probable. (p. 80)

A fundamental speech course is generally required for graduation, so it cannot be assumed a student in the required course has been positively reinforced for verbal behavior in the past. McCroskey (1977) speculates that 15 to 20 percent of young people suffer levels of communication apprehension, and Brooks and Platz (1968) reported one-fourth the students in the basic speech course were reticent. It is difficult though to estimate the number of students who are low in communication apprehension. There are indications the overtalkative student is as much a problem in the classroom as the quiet person (English, 1964). What does seem clear is that all students who enroll in basic speech classes do not exhibit the same communication patterns. The present research employed learning theory to predict the impact of grades on speech performances on varying student levels of apprehension.

The Hypotheses

Grades were defined as anticipated positive reinforcers that are rewarding for students who have been previously conditioned to hold a positive predisposition toward public speaking situations, and as anticipated, negative reinforcers that are punishment to students who have been conditioned to

hold a negative predisposition toward public speaking situations. Daly (1975) describes how children are sometimes punished and ridiculed by their teachers and fellow classmates for failing to read properly or to answer questions correctly. If there are many consistent failures in the classroom, the child will be likely to become high in communication apprehension. Phillips, et al. (1970) says that parents, teachers, and friends play a major role in determining our attitudes toward communication. If a child was encouraged to express ideas with family members at home, and teachers permitted the child to orally interact during school, then that student would probably talk to others with ease.

Both positive and negative predispositions to classroom speaking behaviors were operationally defined in this research by high and low anxiety scores. It seemed reasonable to conclude that the student who was rewarded for speaking out in the past would look forward to rewarding grades in classroom speech performances, and would prefer speeches to receive traditional letter grades. These students might be frustrated and lose motivation without the anticipated rewards. Therefore, one might expect such students to perform better and be more confident in graded classes. Conversely, the student who has been punished for past classroom speaking behavior would prefer that the unavoidable speech performanes not be graded. This preference would be expected to manifest itself in better speech

performances and less self-reported and observed anxiety in the nongraded class. Therefore, the first hypothesis states:

H_1 There will be a significant relationship between grading condition and final anxiety, final performance, and final behavior.

H_a There will be a significant relationship between grading condition and final self-reported anxiety.

H_b There will be a significant relationship between grading condition and final performance.

H_c There will be a significant relationship between grading condition and final behavioral assessment of anxiety.

Since 72 percent of the students in a pass-fail option (Hale, Bain, et al., 1973) reported less anxiety in the pass-fail condition, and McCroskey (1978) suggest that "state CA is a normal response that most people experience when confronted with oral communication in a public setting" (p. 79), it seems logical to conclude that the nongraded speaking condition would be the least threatening for all students. Further, the students with high anxiety who were punished for speaking in the past will be operating in a nongraded condition that will not punish oral performance with a low grade, so it should encourage the extinction of anxiety producing responses. Therefore, if the nongraded condition is likely to reduce anxiety for all students, it should relieve proportionately more anxiety for students who are designated as highly anxious. The second hypothesis

states:

H_2 There will be a significant interaction between anxiety and grades on final performance such that anxiety will have a greater impact in the nongraded condition than in the graded condition.

Method

Subjects

Subjects were 77 students from three community colleges. These students were enrolled in one of six courses in public speaking during the Spring 1980 semester. There were 22 subjects in Experiment I, 23 in Experiment II, and 32 in Experiment III.

Design

This research consisted of three separate field experiments conducted concurrently. Each experiment employed similar research methods and procedures, but used different teachers at different institutions, and consequently different materials, course requirements, examinations, and classroom procedures. Each experiment involved one teacher with two intact classes in public speaking. The two classes taught by each instructor were matched in every major respect except for the method of reporting instructor feedback. In one class, the speeches received traditional letter grades, as well as comments, and in the other class, the speech received comment only.

The variable manipulated in all three experiments was type of response to students' speeches. In the graded

condition, students received traditional letter grades, as well as oral and written feedback on their speech performances. In the nongraded conditions, students received the oral and written feedback, but were not given a traditional letter grade on their speech performances. In both conditions, students were required to give a specified number of speeches to pass the course.

Instruments

Students' predisposition toward public speaking was determined by scores on the Personal Report on Confidence as a Speaker (PRCS). Gilkinson (1940) established validity by comparing speaker's perception of confidence with fellow students' perceptions, and found a coefficient of .81. The questionnaire was modified by Paul (1966) and further modified by Mulac and Sherman (1974). This measure is widely used in research concerned with anxiety in public speaking classes (Bush, Bittner, & Brooks, 1972; Young, 1974).

Concurrent validity for the PRCS was established by Daly (1978). The PRCS correlated with the PRCA ($r = .97$), and with the four other indicators of communication apprehension. No coefficients were less than .83. The subsequent replication yielded no significant average differences ($z = .87$, $p < .10$) which is, "an indication that the correlation observed in the primary study (and in the replication) may be representative of the relationship between measures" (Daly, p. 214).

Daly (1978) also established reliability of the PRCS when he used Cronback's alpha statistic as an indicator of instrument reliability for fourteen different measures. While the average alpha coefficient was .80, the PRCS' alpha coefficient was .91.

McCroskey (1978) mentions two instances when self-reports of communication apprehension will yield invalid data; when the individual is not aware of his or her own feelings, and when the individual is not motivated to give an accurate report. To avoid these pitfalls, Wells (1970) suggest that observed reports of anxiety should be used concurrently with self-report instruments. Therefore, the second predictor variable was the students' observed initial anxiety, which was determined by scores on Mulac and Sherman's Behavioral Assessment of Speech Anxiety (BASA).

Mulac and Sherman (1974) made a claim for construct validity by pointing out that the seventeen specific behavioral items used were based on research by Clevenger and King (1961) and Paul (1972), as well as their own previous research. They write, "In general, these behaviors have been accepted by fields of speech communication and psychology as meaningful indices of speech anxiety" (p. 140).

Mulac and Sherman established validity of the BASA in several ways. Evidence of concurrent validity was provided by a Pearson product-moment correlation between scores by eighteen experts who judged the level of anxiety in ten speeches and total BASA scores given the same speeches by

BASA judges (r = .88).

They reported evidence of construct validity by comparing the total weight of BASA scores for the first and fourth final class speeches. The claim for construct validity was also supported by factor analyses that showed these components of the BASA: Rigidity, Disfluency, Inhibition, and Agitation.

Since the present study took three BASA measures of each speech, rather than the exact number used by Mulac and Sherman, reliability of the judge was established by a test-retest procedure. Three speeches were rated using the recommended four one-minute segments. A week later, the same speeches were rated using only three assessments. A Pearson Product Moment correlation of .98 was obtained establishing an acceptable level of reliability.

Procedures

For each experiment there was an instructor from one of three community colleges who taught two classes in public speaking and was willing to cooperate, who agreed to keep all requirements in both of their classes exactly the same except for the grades placed on student speeches. In one class, the students received a feedback sheet after each performance, with a traditional letter grade on it. The instructor's other class received an identical feedback sheet, except for the absence of a letter grade.

At the beginning of the semester, the PRCS was administered to all students in the six classes. Videotapes

of the first and fourth formal speech assignments were used to assess initial anxiety and initial performance and final anxiety and performance, respectively.

It might be argued that video taping increases anxiety; however, Bush, Bittner and Brooks (1972) found no difference in the effect of videotape recording on high and low anxious subjects.

While this study only measured two speaking performances for each student, all three instructors videotaped all speeches so the students were unaware that the first and fourth speeches were any different from the others. Therefore, it is assumed the effects of the video taping were negligible and held constant across classrooms.

When the fourth speeches were completed, the students were again administered the PRCA. Three expert speech teachers rated the video taped performances in three areas: content, delivery, and organization on a range of 1 to 4 points possible in each area. Experts ratings were averaged with 12 as the highest possible score and 3 as the lowest.

Limitations

There were several limitations to this study. The first was the individual instructors' knowledge that grades are a major concern of the research. This knowledge might have allowed for possible instructor bias, however, it is unlikely all three instructors would have had identical bias toward grading.

If the hypotheses dealt with whole classes, this would be a more serious limitation, but since instructors had no knowledge of individual students' scores, and since the hypotheses were concerned with individual anxiety scores, any instructor preference for graded or nongraded conditions would be held constant across the entire class.

Also since each experiment used only one teacher, it is only possible to generalize from each experiment to that teacher's next courses. However, after the analysis was completed for each of the three experiments, all three graded courses were combined and analyzed. The advantages of designing three separate experiments and doing a combined post hoc analysis is chiefly one of control. Since all three experiments were field research, it was necessary to accept the classroom and teaching methods as they were. The teachers changed their grading policies, but the rest of their teaching method remained the same. By separate experiments, it was still possible to record with some precision the nature of the learning environment; i.e., were outlines required?; how many speeches were required?; was written and oral feedback given by the same teacher for each condition?; was the same textbook used in both conditions?, etc. In post hoc analysis, when all six classes were combined into graded and nongraded groups, there was greater generalizability, but a lack of precision. Not all students had read the same text, heard the same

lectures, or received the same feedback. Nevertheless, information from the three controlled field experiments, as well as the post hoc combined analysis, provides preliminary experimental data on graded vs. nongraded speech performances.

Analysis of Data

In order to determine if there were significant differences between groups, t-tests were used to compare each of the predictor variables. No significant differences were found on any of the initial measures between groups.

In each experiment, a multiple regression analysis was used to analyze data from each condition. In the post hoc analysis, multiple regression was completed on all the graded conditions combined, and on all the nongraded conditioned combined. A confidence level of $p < .05$ was established.

Results

In order to examine homogeneity between students from the graded and nongraded classes, t-tests were performed on the mean scores for each of the three predictor variables. The nonsignificant results (no alpha level exceeded .05) associated with each examination indicates the subjects did not differ significantly in initial self-reported anxiety, initial performance, or

in their behavioral assessment of anxiety according to class group membership. Results of these tests serve as a check on the homogeneity of the subjects in regard to the research measures.

Primary Analysis

Regression procedures were employed to examine the hypothesized relationships among variables. Tables 1 through 6 report the results of the regression procedures.

Experiment I

Table 1

Regression of Final Anxiety, Final Performance, and Final Behavioral Assessment of Anxiety on Grading

Source	df	Sum of Squares	F	Sig	R^2
Regression	3	5.35504	1.93	> .05	.24
Residual	18	16.64496			

Variable	Unstandardized Regression Coefficient	Standardized Beta Coefficient	Hierarchical F	Prob.
Final Anxiety	-.00	-.17	.65	n.s.
Final Performance	.14	.24	1.10	n.s.
Final Behavior	.03	.56	5.64	< .01
(Constant)	-1.12			

n = 22

Neither hypothesis 1_a which stated there would be a significant relationship between grading condition and final anxiety, nor hypothesis 1_b which stated there would be a significant relationship between grading condition and final performance were supported. However, there was significant support (R^2 = .24, F = 5.64, df = 3,18, $p < .01$) for hypothesis 1_c that stated a significant relationship between grading condition and how anxious students were rated on the final behavioral assessment.

Table 2

Regression of Interaction (grading X initial anxiety), Grading, and Initial Anxiety on Final Performance

Source	df	Sum of Squares	F	Sig	R^2
Regression	3	2174.12392	2.86	> .05	.32
Residual	18	4547.14881			

Variable	Unstandardized Regression Coefficient	Standardized Beta Coefficient	Hierarchical F	Prob.
Interaction	-.35	-.01	.01	n.s.
Initial Anxiety	10.58	.60	8.34 <	.01
Grading	2.45	.14	.44	n.s.
(Constant)	79.65			

n = 22

In order to examine the second hypothesis it was necessary to create a variable that reflected the interaction of anxiety and grading. This was accomplished by dividing initial anxiety scores at the mean and assigning -1 to low scores and +1 to high scores. Grading condition was also reflected by + or -1. Grading condition was combined with initial anxiety to form the interaction variable. This procedure was followed in all three experiments.

The second hypothesis that stated there would be a significant interaction between initial anxiety and grades was not supported. An interesting result was the highly significant relationship between initial anxiety and final performance irrespective of whether the students were graded on their performance.

Experiment II

Table 3

Regression of Final Anxiety, Final Performance and Final Behavioral Assessment of Anxiety on Grading

Source	df	Sum of Squares	F	Sig	R^2
Regression	3	9.37574	4.37	< .05	.40
Residual	19	13.58078			

Table 3 (Continued)

Variable	Unstandardized Regression Coefficient	Standardized Beta Coefficient	Hier-archical F	Prob.
Final Anxiety	.01	.32	2.98	n.s.
Final Performance	.40	.68	9.99	$< .01$
Final Behavior	.05	.43	3.91	$< .05$
(Constant)	-4.76			

n = 23

While there was no support for hypothesis 1_a which stated there would be a significant relationship between grading condition and final anxiety, hypothesis 1_b and 1_c were supported. In this experiment there was a highly significant relationship between grading condition and final performance ($R^2 = .40$, $F = 9.99$, $df = 3,19$, $p < .01$) as well as a significant relationship between grading condition and the final behavioral assessment of anxiety ($R^2 = .40$, $F = 3.91$, $df = 3,19$, $p < .05$).

Table 4

Regression of Interaction (grading X initial anxiety), Grading, and Initial Anxiety on Final Performance

Source	df	Sum of Squares	F	Sig	R^2
Regression	3	2767.53442	4.46	< .05	.41
Residual	19	3928.29167			

Variable	Unstandardized Regression Coefficient	Standardized Beta Coefficient	Hierarchical F	Prob.
Interaction	-6.07	-.32	3.42	< .05
Initial Anxiety	9.19	.53	7.85	< .01
Grading	1.23	.07	.14	n.s.
(Constant)	76.63			

n = 23

Support was obtained for the second hypothesis that stated grading condition and anxiety interact to affect final performance (R^2 = .41, F = 3.42, df = 3,19, $p < .05$). However, since initial anxiety was also a high predictor of final performance (R^2 = .41, F = 7.85, df = 3,19, $p < .01$), the interaction may not be the best solution.

Experiment III

Table 5

Regression of Final Anxiety, Final Performance, and Final Behavioral Assessment of Anxiety on Grading

Source	df	Sum of Squares	F	Sig	R^2
Regression	3	1.45281	.44	> .05	.04
Residual	28	30.42219			

Variable	Unstandardized Regression Coefficient	Standardized Beta Coefficient	Hierarchical F	Prob.
Final Anxiety	-.00	-.12	.38	n.s.
Final Performance	.05	.09	.13	n.s.
Final Behavior	.02	.25	.97	n.s.
(Constant)	-20.41543			

n = 32

There was no support for any part of the first hypothesis at this community college. Nevertheless, Table 5 provides the reader an opportunity to compare these results with those of Experiments I and II.

Table 6

Regression of Interaction (grading X initial anxiety), Grading, and Initial Anxiety on Final Performance

Source	df	Sum of Squares	F	Sig	R^2
Regression	3	4136.24444	12.49	< .01	.57
Residual	28	3089.63056			

Variable	Unstandardized Regression Coefficient	Standardized Beta Coefficient	Hierarchical F		Prob.
Interaction	-2.12	-.13	1.22		n.s.
Initial Anxiety	11.67	.77	36.86	✓	.01
Grading	-3.86	-.25	4.03	✓	.05
(Constant)	72.53				

n = 32

In Experiment III the interaction hypothesis was not supported, however it appears there is a significant negative relationship between grading and final performance (R^2 = .57, F = 4.03, df = 3,28, $p < .05$) regardless of whether the student was high or low in initial anxiety. An interesting finding is that grading is significantly related to final performance when the other predictor variables are initial anxiety and interaction, but was not significant when the other predictors were final anxiety and final behavior (the first hypothesis). It also appears that initial anxiety is highly related to

final performance irrespective of grades (R^2 = .57, F = 36.86, df = 3,28, $p < .01$).

Post Hoc Analysis

After combining data from all three experiments, multiple regression procedures were used to analyze results. Table 7 and 8 illustrate results as applicable to the research hypotheses.

Table 7

Regression of Final Anxiety, Final Performance and Final Behavioral Assessment of Anxiety on Grading

Source	df	Sum of Squares	F	Sig	R^2
Regression	3	8.21175	2.90	< .05	.10
Residual	73	68.67137			

Variable	Unstandardized Regression Coefficient	Standardized Beta Coefficient	Hierarchical F	Prob.
Final Anxiety	-.00	-.01	.01	n.s.
Final Performance	.15	.26	4.35	.01
Final Behavior	.03	.36	7.84	.01
(Constant)	-1.52			

n = 77

It would appear that final anxiety was not significantly related to grading condition in either the three experiments

or in a post hoc combination of all six classes. Hypothesis 1_b was supported in Experiment II, and was also found to be highly significant when all data were combined (R^2 = .10, F = 4.35, df = 3,73, $p < .01$). Hypothesis 1_c was supported in Experiments I and II, and strongly supported in the post hoc analysis (R^2 = .10, F = 7.84, df = 3,73, $p < .01$). Thus there seems to be a fairly strong relationship between grades and how students perform as well as how confidently they behave.

Table 8

Regression of Interaction (grading X initial anxiety), Grading, and Initial Anxiety on Final Performance

Source	df	Sum of Squares	F	Sig	R^2
Regression	3	17.19468	1.97	> .05	.07
Residual	73	211.57753			

Variable	Unstandardized Regression Coefficient	Standardized Beta Coefficient	Hierarchical F	Prob.
Interaction	.23	.13	1.45	n.s.
Initial Anxiety	-.39	.23	4.07	< .05
Grading	.22	.13	1.29	n.s.
(Constant)	6.67			

n = 77

Clearly the interaction was not supported when data was combined although it had been supported in Experiment II. Initial anxiety was a significant predictor of final performance irrespective of grading condition. Evidentally how anxious or confident a student is at the beginning of the semester has a strong relationship to their performance at the end of the semester.

In a post hoc supplemental analysis, t-tests were performed on the mean scores for each of the three criterion variables in graded and nongraded classes in the separate experiments. In Experiments I and III no alpha level exceeded .05. However, in Experiment II, (where hypotheses 1_b, 1_c, and 2 were supported) there was a significant difference between graded and nongraded classes in the mean scores for final performance ($t = 2.24$, $df = 11$, $p < .05$). The mean for graded final performance was 7.10 with a standard deviation of 1.29 and standard error of .37. The mean for nongraded final performance was 5.42 with a standard deviation of 2.54 and a standard error of .73. As in the other two experiments, there were no significant differences in scores on final anxiety or final behavioral assessment of anxiety in Experiment II.

A further combined supplemental analysis was performed in order to inform the participating instructors if there was a significant difference between the performance of their anxious and confident students in each method. PRCS scores were divided at the mean and those scoring above

were the anxious students and those scoring below were the confident students. An analyses of variance in final performance by grading condition and initial PRCS scores revealed a main effect on initial anxiety ($f = 3.86$, $df = 1$, $p < .05$). It was necessary to secure a breakdown of the initial anxiety variables in order to determine whether confident or anxious students performed better.

Table 9

Breakdown of Final Performance by Initial Anxiety

	Mean	S.D.	Variance	N
Low Initial Anxiety (confident)	7.07	1.86	3.48	39
High Initial Anxiety (anxious)	6.37	1.53	2.34	38

n = 77

Results appeared to indicate that confident students scored significantly higher than the anxious classmates in final performance irrespective of grading condition. However, when students' initial performance scores were entered in the analyses as a covariate it became apparent that the covariate was the stronger predictor of final performance ($f = 28.98$, $df = 1$, $p < .001$).

These results support the combined post hoc findings of the multiple regression analysis. There was a lack of support for the claim that grading method made a

significant difference in student's final performance.

Discussion

Extreme caution must be exercised before drawing any conclusions and making generalizations because of the limitations in the design of this experiment. The most significant conclusion that this researcher draws from the equivocal results in each experiment is the need to take the problem of grading speech performances into a controlled laboratory setting to see if grades do make a difference. The results obtained in this study may have reflected teacher style, different student populations, or other confounding factors. Under laboratory conditions, various axioms of Learning Theory could be separately examined to test the relationships and models generated in this research. For instance, a future design might well incorporate a group that receives grades on speeches intermittantly rather than continually or never.

While these experiments have not resolved the controversies surrounding grading in public speaking classes, some interesting findings have been quantitatively noted. The mean on final performance was significantly higher in the graded class in only one of the three experiments, and that was the experiment that also supported the second hypothesis which stated that grades and initial anxiety interact on performance. In the other two experiments, results of t-tests found no significant differences in final performance or anxiety measures. If future research failed

to identify substantial differences between graded and nongraded conditions, speech teachers would be free to explore grading methods that best fit their theory of learning and teaching style. It must be remembered, however, that there were results in the first and second hypothesis to support a strong relationship between grades and final performance, as well as initial anxiety and final performance. There was also support in two experiments for the relationship between how confident students behaved and grading method.

If results of hypothesis 1_b and 1_c from Experiments I and II as well as the interaction hypothesis in Experiment II were replicated in future research there would be significant support for the theoretical rationale. As Learning Theory predicts, the anxious students might perform better and behave with greater composure in nongraded performance courses while the confident students might perform best given the incentive of a grade. Further research could maximize teacher options in the design of their speech classes.

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APPENDIX A

MEASURE OF SELFREPORTED ANXIETY

Name _____

Information from the following survey is being collected by a graduate student from San Jose State University for an experiment on how people feel about speaking in public. Although you are being asked to put your names on the questionnaire, your instructor will never be shown your responses and the results will be absolutely confidential.

Indicate the degree to which the statements apply to you by circling whether you (A) strongly agree, (B) agree, (C) are undecided, (D) disagree, or (E) strongly disagree with each statement. Work quickly, just recording your first impression in each case.

		(A)	(B)	(C)	(D)	(E)
1.	I look forward to an opportunity to speak in public.	SA	A	U	D	SD
2.	My hands tremble when I try to handle objects on the platform.	SA	A	U	D	SD
3.	I am in constant fear of forgetting my speech.	SA	A	U	D	SD
4.	Audiences seem friendly when I address them.	SA	A	U	D	SD
5.	While preparing a speech, I am in a constant state of anxiety.	SA	A	U	D	SD
6.	At the conclusion of a speech, I feel that I have had a pleasant experience.	SA	A	U	D	SD
7.	I dislike to use my body and voice expressively.	SA	A	U	D	SD
8.	My thoughts become confused and jumbled when I speak before an audience.	SA	A	U	D	SD
9.	I have no fear of facing an audience.	SA	A	U	D	SD

		(A)	(B)	(C)	(D)	(E)
10.	Although I am nervous just before getting up, I soon forget my fears and enjoy the experience.	SA	A	U	D	SD
11.	I face the prospect of making a speech with complete confidence.	SA	A	U	D	SD
12.	I feel that I am in complete possession of myself while speaking.	SA	A	U	D	SD
13.	I prefer to have notes on the platform in case I forget my speech.	SA	A	U	D	SD
14.	I like to observe the reactions of my audience to my speech.	SA	A	U	D	SD
15.	Although I talk fluently with friends, I am at a loss for words on the platform.	SA	A	U	D	SD
16.	I feel relaxed and comfortable while speaking.	SA	A	U	D	SD
17.	Although I do not enjoy speaking in public, I do not particularly dread it.	SA	A	U	D	SD
18.	I always avoid speaking in public if possible.	SA	A	U	D	SD
19.	The faces of my audience are blurred when I look at them.	SA	A	U	D	SD
20.	I feel disgusted with myself after trying to address a group of people.	SA	A	U	D	SD
21.	I enjoy preparing a talk.	SA	A	U	D	SD
22.	My mind is clear when I face an audience.	SA	A	U	D	SD
23.	I am fairly fluent.	SA	A	U	D	SD

		(A)	(B)	(C)	(D)	(E)
24.	I perspire and tremble just before getting up to speak.	SA	A	U	D	SD
25.	My posture feels strained and uncomfortable.	SA	A	U	D	SD
26.	I am fearful and tense all the while I am speaking before a group of people.	SA	A	U	D	SD
27.	I find the prospect of speaking mildly pleasant.	SA	A	U	D	SD
28.	It is difficult for me to calmly search my mind for the right words to express my thoughts.	SA	A	U	D	SD
29.	I am terrified at the thought of speaking before a group of people.	SA	A	U	D	SD
30.	I have a feeling of alertness in facing an audience.	SA	A	U	D	SD

APPENDIX B

RATING SCALE

JUDGE: _____

TOPIC OR NAME OF SPEAKER: _____

CIRCLE

ORGANIZATION:

1 2 3 4
Poor Excellent

CONTENT:

1 2 3 4
Poor Excellent

DELIVERY:

1 2 3 4
Poor Excellent TOTAL _____

APPENDIX C

BEHAVIORAL ASSESSMENT OF SPEECH ANXIETY RATING SCALE

		not at all slight moderate strong									
Voice	1. Quivering or tense voice	0	1	2	3	4	5	6	7	8	9
	2. Too fast	0	1	2	3	4	5	6	7	8	9
	3. Too soft	0	1	2	3	4	5	6	7	8	9
	4. Monotonous; lack of emphasis	0	1	2	3	4	5	6	7	8	9
Verbal Fluency	5. Nonfluencies; stammers; halting	0	1	2	3	4	5	6	7	8	9
	6. Vocalized pauses	0	1	2	3	4	5	6	7	8	9
	7. Hunts for words; speech blocks	0	1	2	3	4	5	6	7	8	9
Mouth and Throat	8. Swallows	0	1	2	3	4	5	6	7	8	9
	9. Clears throat	0	1	2	3	4	5	6	7	8	9
	10. Breathes heavily	0	1	2	3	4	5	6	7	8	9
Facial Expression	11. Lack of eye contact; extraneous eye movements	0	1	2	3	4	5	6	7	8	9
	12. Tense face muscles; grimaces; twitches	0	1	2	3	4	5	6	7	8	9
	13. "Deadpan" facial expression	0	1	2	3	4	5	6	7	8	9
Arms and Hands	14. Rigid or tense	0	1	2	3	4	5	6	7	8	9
	15. Fidgeting; extraneous movement	0	1	2	3	4	5	6	7	8	9
	16. Motionless; lack of appropriate gestures	0	1	2	3	4	5	6	7	8	9

		not at all			slight		moderate			strong
Gross Bodily Movements	17. Sways; paces; shuffles feet	0	1	2	3	4	5	6	7	8	9
Overall	18. Overall anxiety estimate	0	1	2	3	4	5	6	7	8	9